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A

LECTURE
INTRODUCTORY
TO A *handwritten*

COURSE OF POPULAR INSTRUCTION

ON THE

CONSTITUTION AND MANAGEMENT

OF THE

HUMAN BODY.



By **THOMAS BEDDOES, M. D.**

The proper study of Mankind is MAN.

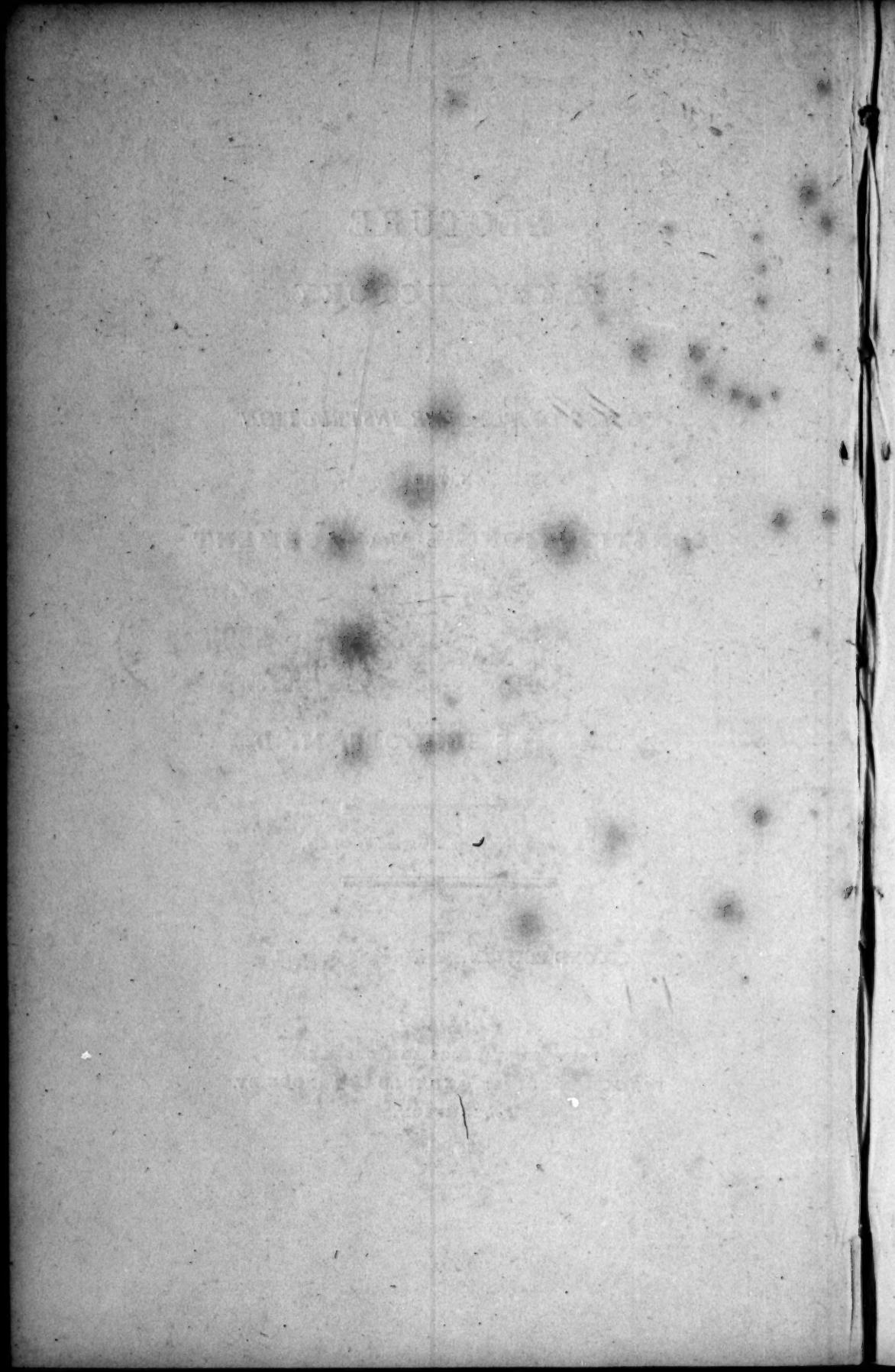
SECOND EDITION, Corrected and Enlarged.

BRISTOL:

PRINTED BY BIGGS AND COTTLE,
FOR JOSEPH COTTLE, AND SOLD IN LONDON BY
J. JOHNSON.

1798.

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TO

THE ABSENT PROMOTERS OF THIS ATTEMPT:

THE BISHOP OF SODOR AND MAN,

THOMAS COUTTS, Esq.

BENJAMIN HOBHOUSE, Esq. M. P.

LORD LANSDOWN

LORD STANHOPE,

JAMES WATT, Juny. Esq.

AND

PARTICULARLY

THOMAS WEDGWOOD, Esq.



A Practitioner in surgery accidentally informed me many months ago, that he was desirous of giving a course of anatomical lectures in Bristol. To furnish individuals with so much knowledge of themselves as should enable them to guard against habitual sickness, and a variety of serious disorders, had been long an object of contemplation with me. I therefore proposed that the course should be modelled according to this idea. I remarked, that a distinct exhibition of the larger lines of anatomy and physiology would be also the mode of instruction best adapted to young students in medicine; much observation of lectures having convinced me that extreme minuteness is only perplexing to beginners. This, joined to some other considerations, prevailed. The person in question has devoted much of his spare time to the preparation of anatomical specimens, and he has associated in the undertaking a fellow practitioner, who possesses a valuable collection. For my own part, I shall contribute my utmost assistance to the design, in whatever way that assistance shall, upon reflection, appear most likely to be effectual. The purpose of the course will be to exhibit the structure of the human body, in a manner neither superficial nor tedious, to explain the functions of the parts as far as they have hitherto been investigated, to illustrate by specimens the principal deviations of these parts from their healthy conformation, and to intersperse such reflections as may be useful in physical education, and the whole conduct of life.

CLIFTON, October, 8, 1797. THOMAS BEDDOES.

The foregoing advertisement is preface quite sufficient for the lecture that follows. The author wishes that its publication may produce similar undertakings elsewhere. He shall, perhaps, better promote his purpose, by telling that Messrs. Bowles and Smith, who undertook the course, are more numerously attended than they expected. Indeed, he believes, the friends of the design did not reckon upon an audience half so large.

November 18, 1798.

I have been informed that it is designed to undertake a Course of Lectures similar to those of Messrs. Bowles and Smith in the course of the ensuing Summer at New-Castle upon Tyne. And a friend of mine at Bath, admirably versed in anatomy and physiology, has expressed an intention of engaging in an attempt of the like kind. At Bristol it is on the point of being repeated.

Dec. 18, 1798.

HEADS
OF THE
INTRODUCTORY LECTURE.

Spirit and tendency of the succeeding lectures—of the chief circumstances in which the public health has improved during these latter ages—of inoculation—scurvy—contagion of fever—treatment of children—female dress—leprosy—of the improvements still to be desired—consumption—habitual feebleness—mortality of children—of the prevailing neglect in regard to the instruction of young people concerning those causes by which health and happiness are impaired—College setting—advantage of proper instruction in the œconomy of the human system. how it is to be attained—popular books of practical medicine cannot convey it—whether it can be attended by ill effects—Proposal of a select course of anatomy for females—Conclusion.

Account of a select course of lectures, delivered to a mixed audience at Bristol—Difficulties and precautions—subjects of the lectures.

2 GRAZING

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2 GRAZING 2000000

GENTLEMEN,

You are already, in general, apprized of the object of these lectures. The principle by which they are to be regulated, was explicitly set forth to the public; and you must be prepared for a course essentially different from such as are usually delivered in the schools of medicine. Disregarding the profession in which you may be actually engaged, or may hereafter design to engage, we purpose, in the first place, to lay open to you, your own physical constitution. We are aware that, before a mixed assembly, such a subject can alone be properly treated, according to a measure and method, difficult at once to seize. Though we should attain to be perspicuous, it does not follow that we must be inaccurate or flight.

Our explanation of the great doctrines of anatomy will, if we can realize our own ideas, answer every demand of liberal curiosity upon the stock of information hitherto accumulated. With me, however, immediate gratification is a very subordinate consideration. Many detached points of moment will, no doubt, be elucidated, while the parts are before you, because the elucidation can then be most distinctly understood. But I lay principal stress upon the demonstrations, as necessary for furnishing data towards that species of knowledge to which the concluding lectures will be dedicated. On this head I shall, in a few moments, freely enlarge. An essay on the means of securing health can be indifferent to no man, who has feared for himself, or pitied in another, those evils, by which daily life is most cruelly infested.

Beyond the limits which I have thus loosely assigned, it is presumed that the majority of this audience will not stretch their expectations. But we have, among us, some of the medical

pupils of the city : and before I dismiss the little I have to say on the first part of the course, it may be proper to add a word for their satisfaction. I take it for granted that they have not overlooked an intimation in the prospectus, designed for them : and I hope they are disposed to admit its justness, till the contrary shall appear. It requires, indeed, but little sagacity to discover that individuals, whatever be their difference in other respects, are pretty nearly on an equal footing in relation to our design, if *these* have scarce entered upon the circle of medical science, and *those* have devoted themselves to different pursuits. A plan calculated effectually to instruct the one, bids fair to present to the other as much information as most persons may be capable of receiving at one time.

Unsteadiness is, I think, the acknowledged attribute of childhood and early life. As we advance beyond our school and college years, we are apt to become more and more uniform, repeating the same movements in nearly the same

order. The station many of us occupy in society, enforces regularity of habit during a large portion of our day ; and the very hours of which we could variously dispose, come at length to be appropriated with greater or less exactness. Hence the busy and the idle grow alike deaf to every fresh call upon their curiosity, unless it be in behalf of some spectacle that promises to take up but little of their time—at least does not threaten to make any serious demand upon their attention. Where the established associations lead to nothing palpably injurious, it may, in fact, be difficult to persuade your neighbour that he ought to make a sacrifice of his leisure to your taste. Before he wrests himself from his habitual amusements, he may justly require that you should establish a strong title, on the ground of advantage, in favor of the new pursuit, towards which you would direct his thoughts.

Such is the condition which I hope now to fulfil. Hence I was desirous of introducing the proposed course by a public lecture. But if I could have been ever so certain that no unde-

cided individual would have appeared here to night, I should, nevertheless, have thought it right to submit to you the following train of reflections, as it may enliven your future attention, and create for the subject a more lasting interest in your minds.

Let us take a summary view of those improvements in the personal condition of mankind, upon which we in Great Britain can fully reckon ; and afterwards enquire what is principally wanting towards domestic happiness, as far as that depends on exemption from disease.— At the outset of this enumeration, I perceive that clearness of connection will oblige me to recall several things that cannot have escaped your notice. I may touch upon truths at once trivial and afflictive ; therefore doubly unwelcome. I have, indeed, no desire to expatiate on common places. But it cannot be a disadvantage to my inferences, if they follow from premises of indisputable notoriety.

The first acquisition that will probably occur

to you, is the diminution of danger from the small-pox. A superior woman felt the advantage which artificial communication of a disease, dreaded beyond our conception, conferred on a race of barbarians ; and at the hazard of her children, effected its introduction into civilized Europe. The success of this noble design, and the interesting manner of its execution, appear expressly adapted to affect the imagination and the heart. The memory however of this great benefactress has been little cultivated.— The advocates of inoculation indeed, confess, that throughout extensive districts, the small-pox destroys more lives than of old. (*Haygarth's Sketch.* p. 30, *Johnson.* 1793.) For many among the poor, obstinate from ignorance and supine from despondence, refuse their children the benefit of inoculation ; and its partial adoption spreads the poison. However, as soon as they shall be prepared to receive its succours, the art which we owe to Lady Mary Wortley Montague, stands ready to succour mankind, even to the extermination of the evil.

To a particular class, the scurvy was, but lately, not less formidable than the small-pox. By the continued efforts of able and active men, its ravages on ship-board have been greatly checked; and where fresh and, particularly, where acid vegetables can be obtained, no complaint, I fancy, whatever, is so certainly, or so pleasantly removed.

Experiments repeated at intervals, during the last twenty years, and now following up with due diligence, seem to promise the extinction of the power of febrile contagion. The effluvia, it is thought, may be rendered innoxious as they issue from their source in the sick body. At Manchester, regulations for preventing communication with the infected, improved from former practices and from a variety of projects, have been attended with the most complete success. The observation (which I have myself verified) of the propagation of fevers from house to house for years together, almost makes one wish for an institution like that which has been found necessary to stop the progress of conflagrations.

To cleanliness and ventilation, now so extensively practised, it is, with justice, believed, that we owe our exemption from several pestilential and loathsome diseases. Of the cessation of leprosy, the strangest and most hideous of all, I lament that the causes have not been more minutely traced. For many apposite collections and curious researches, we are indebted to the Italians and Germans. They await the sagacity of some enquirer who, by exhibiting a faithful picture of life at different periods, shall shew by what degrees we have emerged from the various wretchedness of the middle ages. Such a work might be more agreeable to some tastes than certain rhetorical compositions, by which modern historians have gained universal suffrage, without communicating, however, to the great bulk of their readers, many ideas that come home to their bosoms and business.

There is some reason to suppose, that from the inattention of our ancestors to fresh air, multitudes must have perished in the very dawn

of existence. In our times, grown persons have been dangerously affected by such a deficiency of this necessary of life, as did not even produce immediate uneasiness. Infants have perished in great numbers by a slow suffocation, terminating in convulsions. As soon as the want of ventilation was observed, the mortality ceased. In applying these facts, however, it must not be forgotten that the air, though seldom admitted at the window, could always find its way, through innumerable crevices, into an ancient apartment.

To the full enjoyment of the atmosphere, the free use of the limbs has been happily added. You have probably observed those mummy-like figures on old monuments, where the body is so curiously trussed as to give the appearance of an inorganic mass, appended to an infant's head. It is impossible not to rejoice at the emancipation of beings, so susceptible of injury and so impatient of confinement.

We have likewise an undoubted right to congratulate ourselves on the increased sobriety of the age. But here again the cautious enquirer must pause. Although we are grown more sober, are we yet sufficiently temperate? Taking our active ancestors with all their habits, can we be sure they sustained greater injury from their greater excesses?

It would be unjust not to enumerate among important improvements, certain modern changes in female dress. Whether the sex listened to the remonstrances of their medical advisers; or a leader in the ranks of fashion, at some lucky moment, was apprized of the elegance of the Grecian figure by the whisper of her guardian sylph, I am not informed. Nor would I suggest the doubt, if some augury of the permanence of the alteration might not be drawn from its motive. In one of the capital cities of the continent, the origin of a memorable improvement is well known, and may be amusing to persons unversed in these mysteries. "That to

" which an hundred thousand writers would
 " have been unequal," says an author of repute,
 " was easily effected at Vienna by VIGANO, the
 " favorite opera dancer. This woman, almost
 " in an instant, caused the long slender waists
 " and high heels to disappear from among the
 " far larger and more refined part of the ladies
 " there." " A fine hint," adds my author,
 (what I am sure would never have occurred to me)
 " a fine hint for statesmen, how most speedily
 " to abolish pernicious abuses in female attire!"
Salzburg. Mediz. Zeitung fur 1794. iv. 11.—But
 have not favorite actresses at home wrought
 important changes in fashions ?

THESE attainments are valuable. They
 contribute hourly to the comfort and satis-
 faction of multitudes. Man never shews more
 debased than when he conceives himself the
 butt of the malignity of dark, irresistible
 powers. It is animating to think that we
 can move, secure from those arrows that flew
 unseen, and so often smote our ancestors. But

above all our present attainments, I value a disposition, which if I mistake not, is arising in the public mind. This disposition is discoverable in the interest which treatises on the laws of life excite beyond the bounds of medical profession. It is most agreeably proved by the number of parents who devote themselves to the early care of children ; a task, formerly devolved upon menials, or upon dependants but little higher in talents or esteem. And if more evidence be required, it is furnished by the reception of our offers to gratify your desire of information, to the extent of our means.

Under this persuasion, I proceed with less reluctance to the most ungrateful division of my matter. Though my representation, to be genuine, must be gloomy, instead of despondence ensuing, an active, ardent wish to see the remaining calamities of life removed, will engraft itself upon the disposition above described. Must not this feeling, when it thoroughly pervades the public, animate industry, kindle geni-

us, and hasten every desired improvement ? It is, at least, a more promising state than the torpor which accompanies ignorance, and always prevents timely recourse to defensive measures, though it is far from always abating the poignancy of distress, after the evil is incurred.

I SHOULD disappoint you if I did not place in the front of subsisting evils, that perpetual pestilence of our island, *consumption of the lungs* : concerning which, I leave it to future calculation to determine how far it is less destructive, on the average of years, than the plague itself would be, were it to revisit us occasionally, as of old. Consumption, if we may trust the recollection of our seniors, and certain indications in the records of medicine, is increasing in frequency. Enquiries, neither very limited nor carelessly conducted, have afforded me concurring evidence, though of a different, and in my opinion a less vague character. It is certain that we daily see families thinned, and not unfrequently exterminated, by repeated invasions

of this disease. Think, (if you have escaped every such trial yourselves) of the state of parents suspended on the rack of agonizing expectation from the loss of a first child, till the imminent danger of the last ; and then say, if it be absurd to qualify heads of families to act at home as *inspectors of health.*

Where the ravages of consumption have been experienced, the slightest tokens may justly excite suspicion. In a very great majority of phthisical persons, I believe, whatever may have been the previous history of the family, distinct warnings are visible long beforehand. Here, then, did we know how to employ it, appears ample interval for preparation. And perhaps the party menaced is, in fact, recommended to the dumb bell ; or put upon a course of unsavory broth or jelly, prepared according to one of the receipts which well-meaning individuals, principally females, hawk with importunity from one sick chamber to another, as SOVEREIGN IN COUGHS AND COLDS. Recourse,

it may be, is had to an advertised secret composition. The event, whichever expedient is preferred, is much too uniform. You may, if you chuse, every day observe it for yourselves. You may gather it, I suppose, from the language of medical men; or you may deduce it from the bills of mortality, however inaccurate.

I take this early and particular notice of consumption, because no topic more important can be brought before a British audience. And if so mournful a statement be true—if persons liable to the complaint, as well as their friends, are sometimes too ill-informed to beware in time—if the precautions employed by others are unavailing—if, in short, it be the common fate of this class of the feeble to be dragged through a long avenue of pain to a premature grave, in what conclusion shall we say that humanity and common sense unite? Shall the public still be left alike destitute of the means of prevention, and unconscious of the signs that indicate a necessity or seeking these means without delay?



Do the dark hues of this picture inspire a doubt whether our modes of prevention are preferable to our modes of cure ? Then with renewed confidence I assert : " It is still more urgent to enlighten the general opinion, that we of the profession may be prevented from reposing in lucrative indolence."—Whether the last unfavorable supposition be just or unjust, I am not now examining. I put every case. It is for you to judge whether families be not without *some* species of information, which the death-register of the country renders it evident they ought to possess.

An observation applicable to the science of the affections of the human body and to every other science suggests itself here. *The more widely any species of knowledge is disseminated, the more rapidly may we expect that it will make advances.* Its cultivators will not fail to be actuated by the enlightened interest thousands take in their labours. Let it be recollected—and I see not why the allusion should be thought

disparaging—how powerfully comedians are incited to surpass their usual performance by a crowded and intelligent audience. Need I add that by multiplying the number of minds in activity, we multiply the chances of fortunate combinations ?

It cannot be unknown to you how strongly a late celebrated female writer has excited admiration in some and abhorrence in others, by her comments on the feebleness or delicacy at present conspicuous in the more opulent portion of her sex. The fact is fully entitled to the consideration of him who aspires to model a course of popular instruction upon the necessities of his contemporaries. At the periods that try the female constitution, it entails most serious evils upon those by whom it is inherited or acquired. I pass over small hourly inconveniences. In addition to these, it doubles the burthen of pregnancy, subjects to miscarriage, occasions difficult child-birth, creates danger during the period immediately succeed-

ing, incapacitates for suckling, and when the attempt is made, renders the mother liable to be exhausted before the child is replenished. You would be astonished at the number of women, not previously accounted fickle, whose life, from the commencement to the termination of child-bearing, is a long disease. And when you come to perceive how exactly other effects of tenderness of habit tally with this, and superadd the evidence of travellers, you will be compelled to believe that much of this bitterness is of our own infusing into the cup of life. For the sake of those who have least attended to the facts that countenance such an opinion, it may be worth while to produce one short illustration out of many that are at hand. I shall take it from a recent book of travels. The author is Dr. Hacquet, a physician of Vienna. The scene lies on the confines of the Turkish and Austrian dominions. I translate literally :—

“ The lying-in-women never think of the

“smallest assistance. I had here, as elsewhere
 “before, the opportunity of being in a cabin
 “where a woman was delivered. Observing
 “that her time was come, I tarried till she got
 “rid of her burden. I asked her if she had no
 “female assistant:—“*Ob no!*” she replied,
 “*there is no need for this!*” And in truth all
 “was over in half an hour. She was delivered
 “standing upright in a corner of the hut. The
 “child fell from her on a little hay, upon
 “which the navel-string tore asunder, and
 “was not tied. She now went to bed, and a
 “young man, whom she had with her, gave her
 “the babe and a glass of brandy. That was
 “all. On asking her why she did not tie the
 “child’s navel-string, she said, “*there is no*
 “*necessity.*” She knew, it seems, from the
 “experience of larger animals, that torn vessels
 “bleed little or none.”

So much for the Carpathian constitution.
 Among savage tribes the case occurs—and in
 many warm climates parturition seems little for-
 midable.

As to our own countrywomen, I do not conceive how they can be rendered more hardy or less *nervous*, if that term is preferred, otherwise than by being seasonably taught the principles of self management—its *principles*, since I shall endeavour in the sequel to shew that little good can be expected unless we proceed as in other instances, where we exhibit to sense that connection between cause and effect which constitutes the order of nature. The mode and the season may require, indeed, nicety of judgment. And whereon can nice judgment be better exercised? An observer of mankind has remarked, that it is better to be born to a cheerful temper than to ten thousand a year. I can conceive that organs, pleasantly performing their functions through most of the seven stages of life, are of as great value to the possessor, as accomplishments capable, for some few fleeting moments, of enrapturing ten thousand beaux.

In aid of delicacy of constitution, Art has engaged in many a contest with Nature. The

carpetted floors, stuccoed walls, and double doors of modern apartments, are intended as its screen. But these, reinforced with the double windows of the north, would be an unavailing protection. Nature, brandishing her scourge, pursues with quicker steps than those who forsake her ordinances can retire. The susceptibility of impression increases faster than ingenuity can bar out external agents; and in the best secured fortress of effeminacy, it is the fate of the occupant to shiver more at the inclemencies of the seasons than the mountaineer who is exposed to all the blasts of winter.

Of all the cases in favor of diffusive medical information, I think that of infants the most striking.—In London, more than half perish before the fifth year. The proportion of deaths is every where prodigious. I am far from conceiving that the whole mortality originates in mismanagement; but that a considerable share does, I believe partly from observation, and partly for the following general reason:—The

human machine, at all times frail, consists at first of parts peculiarly delicate and having an adjustment peculiarly liable to disorder. Peculiar pains, therefore, should be taken to mark those obstacles in the road of life, against which it is so continually dashed, and irreparably injured, if not entirely destroyed. Except in rare emergencies, the self-dependent adult may be thought able to guide himself. The infant palpably relies every moment on extrinsic aid ; nor can any thing supply the want of *skill* in his superintendants, any more than the want of *care*.

I shall not risk fatiguing you by repetition of similar instances. You may run over in thought the crowd of examples, whence it results, that (inadvertently indeed for the most part, but) regularly and according to established usage, health is bartered for *the chance* of wealth or admiration. Seldom any one for himself or for the heirs of his family-arrangements and their consequences, boggles at the price. Phi-

losophers, it is true, rank both gold and personal accomplishments among the species of power ; since they can procure services from others. But what if some *dis-ease*—which even in its etymology corresponds to *pain*—infests itself during their acquisition under your skin, entwines itself with every fibre of your substance, and having effected this lodgment, bids defiance to all the labour, skill, and admiration, the powers you possess, can command ? Is this a lot which any one can covet for himself ? Is it one to which, with full cognizance of cause and effect, he can predestine a child ?

A certain stock of just conceptions concerning the disposal of capital in land and capital in money having long been created, and the contrary having obtained with regard to the treatment of the human animal, no wonder the difference should be sensible in his general condition. We employ our minds upon the combination of those ideas which we have learned to manage ; for want of such ideas the article of health is left, as it needs must, to shift for itself.

That every succeeding generation, as fast as it acquires capacity for comprehending them, should be thoroughly grounded in the terms, by which alone they can hold that, which when once lost, they are bound by the condition of their existence, beyond every other possession to regret, seems but bare justice. Is it not a debt, created by the parental relation itself? And what parent, to whom the payment is possible, shall hold himself acquitted, till it is strictly discharged? even though the consequence should be a small percentage upon the child's patrimony. Is it not a consideration for exemption from visitations, of which as precise intelligence and a vigorous fancy enable any one to form livelier images, with the deeper horror will he shrink from the thought that connects them with his own capability of pain?

Scenes are by no means unfrequent, where such reflections, or rather surmises, are forced upon the most unthinking. But they are faintly conceived, and after a short season of regret, every vestige of their existence is effaced.

If you have ever witnessed the long agonies that close the career of the debauchee, you can hardly fail to have heard him bitterly lament the want of a timely and adequate warning. As these agonies rarely extinguish, and sometimes exalt natural affection, is it not strange that anticipating sympathy and a deep sense of the fatal consequences of hereditary ignorance should work together in vain ; and that some plan for saving his offspring from death-bed groans, such as he has himself been doomed to utter over an unintentional suicide, should never flash upon the mind of the repenting sufferer ?

It is true : though they should be completely orphans, they will not be permitted, without admonition, to destroy themselves by abusing the power of wealth to procure enjoyments.— The father was not lost for want of being *talked to*. At his outset in life, he was, no doubt, as we all are, provided with store of good precepts. Afterwards he had advice, perhaps till his habits

were rivetted, certainly till disgust was created. It has probably been reinforced by the tears of a mother or a sister. Remoter friends have enveloped it in expressions of kindness and esteem. From the companions of his revels it has come, exasperating with taunts and polluted with oaths. Nay, the very toad-eater has been known to put on the guise of the affectionate monitor.

To the victims also of high-wrought sensibility and preposterous abstemiousness advice is regularly administered in every soothing and every offensive form. I speak at this moment of extra-professional advice. I suppose my subjects only ripening for the physician.

By some, for whatever reason, advice is universally despised as impotent. All lament its frequent inefficacy. And the case admits not of controul which when attempted does but irritate. In the absence of temptation and on a moving occasion, exhortation to a prudent conduct may touch a susceptible heart. But

as men are ever ready to resent encroachments on a right (supposed inviolable) to the disposal of their own person, you perceive how easily it will give pride the alarm. For my part, I scarce see by what inlet it is to reach the understanding, much less how it is to maintain its ground. What indeed is advice in all its varieties from entreaty to injunction, but opinion expressed in the optative or imperative in place of the indicative mood ? And what can be the weight of opinion, when the giver is supposed but little conversant in the principles of the art to which the question belongs ? Where actual observation or dear-bought experience is the foundation of opinion, there it will powerfully influence conduct. Thus it becomes " parcel of the mind." But to the receiver, when unprepared by observation or by feeling, it is altogether extraneous, and must shortly drop away of itself ; nor can it have the smallest chance of keeping its hold, when assaulted by temptation from within or from without. If therefore you mean indelibly to

impress truths, indispensable to the welfare of human beings, are you not absurd if you neglect to blend them, by help of the senses, with the mass of ideas, and incorporate them then with the very essence ?

One might almost imagine the presumptuous temperament of youth to have been intended as a caution from nature not to confide the deposit of their well-being to a safeguard so precarious as mere authority ? Recollect what were your own predominant feelings, while you were fast approaching towards maturity ! Did not the conscious increase of mental and corporeal vigour fill you—the first with disdain of the timid maxims of your seniors—the second with an eager desire to measure yourselves with the powers represented by your advisers as so noxious ? Supersede, then, authority by conviction. Check the momentary rash propensities of your pupil, by enlarging his views. Set before him his station and connections in the universe, that he may not dream of standing, in

privileged security, above the laws to which every created existence is subject.

Individuals, may doubtless, think highly, and with justice, of their talent for giving advice. With such I will have no dispute. For my scheme, it is sufficient, if they but accept ocular demonstration, as subsidiary to their eloquence.

I am glad to have it in my power to corroborate these sentiments by a species of authority which doubtless has sometimes had more than its due weight. But here it seems indisputable, as the result so perfectly corresponded with the theory. Every classical scholar bears in memory the dextrous conduct and penetration of Horace. He has himself minutely described the origin of these qualities. His father, it seems, had the good sense to abandon the usual easy strain of admonition, and was, himself, at the pains of placing facts under the young man's eye.—



—*Insuevit pater optimus hoc me,
Ut fugerem exemplis vitiorum quæque notado.
Cum me hortaretur parcé, frugaliter, atque
Viverem uti contentus eo, quod mi ipse parasset:
" Nonne vides Albi ut malè vivat filius utque
" Barrus inops? magnum documentum, ne patriam rem
" Perdere quis velit,"*

HAVING determined what ought ultimately to be learned, let us consider the progress of acquisition. The first necessary step is not dubious. To comprehend the healthy functions and possible injuries of our frame, its structure must be in some degree understood. The ancient physicians attended patients with the sedulity of our nurses. But for want of preliminary information, they were baffled in all their efforts to distinguish the causes and connection of the phænomena, presented by the sick bed. They must have been nearly in the situation of savages, who without any previous knowledge of the mechanism of the steam engine, should fix their attention upon its oscillating beam, in order to make clear to themselves the reason of the alternate ascent and descent of the ends.

Some of your number may painfully anticipate the details of anatomy. I can enter into the tremors of the most apprehensive. I have had them in full force myself. But those who have courage to risque the first encounter, may be sure of conquering the principal portion of their false alarm, which will very soon subside and be altogether forgotten. By help of the discoveries of modern chemistry, the nuisance of putrid smells may, I believe, be abated ; and were the ingenious called upon by the public voice, models sufficient for many purposes of popular demonstration might be contrived. These models would imperceptibly subdue the aversion of the delicate, and prepare them for witnessing an exhibition of the parts themselves without disgust. By conciliating the mind to these images a great impediment to the most important and the most curious of all human studies would likewise be removed. For it is a well-known obstruction to every branch of the healing art, and by consequence a public misfortune, that we are all, in early youth, made or

suffered to acquire an abhorrence towards the objects of anatomy. Hence, I suppose, in part originates that frequent, (and according to my experience, almost constant) refusal of permission to examine the bodies of the dead. It is also, I am aware, in part to be ascribed to false tenderness. However it may originate, I reckon, among the probable advantages of our undertaking, the diminution of an evil that daily leaves in uncertainty points of the highest consequence to the living. I trust that even though you may have previously succeeded in breaking these pernicious associations in yourselves, you will hereafter be more in earnest to soften the *cruelty* your acquaintances may unthinkingly harbour. For cruelty is the proper name for every sentiment which opposes the good of some, by enjoining or impeding what would not be injurious to any.

It was suggested, I think, by the celebrated **VAN SWIETEN**, to introduce young men in the course of education, into the venereal wards

of hospitals. That, in the intercourse of society, some general notions are acquired concerning the baneful effects both of this disease, and of its specific remedy, could not be unknown to a physician of VAN SWIETEN's opportunities. But he must have been of opinion, that the fulness and precision of information, which can only be obtained by comparative and connected observation, are much more likely to lessen imprudence in the amours of youth. You can extend this suggestion for yourselves to other occasions, on which we incur calamity unawares. I do not see why popular clinical lectures should not be joined to popular anatomical lectures. They likewise should differ widely, in plan and execution, from clinical lectures for medical pupils. It must be their aim to make fully sensible the mischiefs arising from systematic irregularity, from injudicious management after accidental exposure to the inclemencies of the weather, and from the other ordinary errors of individual conduct. They must explain the origin and character, much more

minutely than the treatment, of diseases. They might be conveniently undertaken, wherever there exists an infirmary ; and over and above their advantages to the other members of the community, they would, I believe, be indirectly beneficial to the objects of these institutions. But I do not think it prudent to enlarge, at present, upon this hint, lest I should make that appear impracticable as a whole, which when properly undertaken by parts, will neither suggest in prospect, nor offer in reality, any serious difficulty. I now wish to impress (what may have struck you less forcibly) the radical difference between a set of notions, picked up by snatches and loosely tacked together by hear-says, and a body of information, founded in clear perceptions, and proceeding upon authentic testimonies from properly qualified observers, where facts cannot be brought under the senses. Is it not probable that these two sorts of knowledge, (if the former can be so called) will differ in their consequences as widely as in their essence ?

You will allow me to illustrate my positions by an example. Some substances are known to produce the most horrible effects, soon after being taken. The name of these substances occasions so much dread, that many house holders will not admit them within their doors ; and scarce any vender will retail them without enquiry. The degree of caution depends on the speed and violence of their operation. Violent, but slow poisons, are daily taken. A little custom renders their instantaneous effects, first grateful, and at length necessary ; while the complete succession of the changes they introduce into the structure and functions of our organs escapes notice. Hence, there may appear room for chance to intervene and to divorce any disagreeable remote effect from its cause. By bringing to light the chain of events by which they are connected, you assimilate the second to the first case, and undoubtedly take the most effectual way to dissipate a fatal delusion.

I allude here, as you will perceive, to the poison of fermented liquors. How wretchedly the drunkard usually perishes, you are not to be told. The miseries which the sot, in trying to compound with excess, entails upon his declining years, are somewhat less notorious. But the damage sustained by persons who, without belonging to either of these disreputable classes, have not been properly initiated into the discipline of temperance, is least of all suspected, though most deserving to be understood. The mode of living in our English Universities, accompanied by the subsequent history of the members, would most completely exemplify the evil. There is nothing in the manners of the age to urge the daring spirit of youth to frequent intoxication. It is therefore to be expected that greater sobriety should come to prevail in those seminaries; and I believe all observers will agree, that this is remarkably the fact. The more opulent students, however, almost without exception, assemble in the afternoon, and partake of the fiery wines of

Portugal, or some mixture that passes for such, and, from its strength, is not *less* pernicious, Others find an equivalent. The practice by slow degrees abolishes every enviable distinction of the prime of life. The whole exterior is visibly affected ; and to represent this gradual waste of youth were a task worthy the combined talents of the philosophical anatomist and the moral painter.—Sleep, in the first place, loses somewhat of its refreshing power. The commencing college debauchee no longer opens his eyes upon the dawn with the school-boy's alacrity. As yet, however, he soon shakes off his dullness ; and his spirits mount to their usual pitch. As he advances in his career, he recruits less speedily : and the next sensible injury is the loss of the happy faculty of being easily pleased. His general feeling of existence afterwards becomes incessantly uneasy ; and unless supported by conviviality, he constantly droops. Other excesses may help to consume the Promethean fire ; and although no single circumstance will allow for the general sadness

of the English character, the abuse of strong beer and wine is doubtless among the principal causes. The few healthy Englishmen at least who have always restrained from them, seem by no means deficient in cheerfulness ; so that the bacchanalian who declared that he would not keep company with any man that drank water but his cousin Waller (*life of Waller the poet*), had probably no other water-drinker among his acquaintance. Do not the nations, descended from the same ancestors, differ from us at present as widely in this article of temperance as in dramatic liveliness of demeanor, and in a disposition

To frisk beneath the burthen of four score ?

You may wish to know what evil is portended by the gloom which I have described as beginning to gather so early. The upshot depends upon peculiarities of constitution which we are not able to ascertain, and on accidents which we cannot foresee. As these shall dispose, it may be madness, dropsy, or palsy, preceded by

the tortures of the gout. The least formidable termination is in hypochondriasis, of which thousands carry away the seeds from the seat of their academical studies. As long as they persevere in the pernicious habit, which perhaps unsuspectedly has taken root there, the advantages of a country residence, which so frequently falls to their share, can afford them no relief. The continual depression, which together with indigestion, forms this harassing disorder, pursues them to their retirement, and occasionally is aggravated to feelings of unsupportable horror.

In cases of apparent exemptions from the usual penalty, unreserved devotion to Bacchus, are sometimes flippantly quoted. The fallacy of this excuse for intemperance, I shall probably have an opportunity to expose more fully hereafter. In the mean time, I shall remind you, that the doctrine of counteracting causes makes part of every branch of philosophy. A power is not the less effective, though balanced by another unknown power. To reconcile these

exceptions to a general law, is always the last thing done in giving perfection to any branch of science; and, in Astronomy, the most compleat of all, it has been very lately accomplished. It is, therefore, not surprising that obscurity should still hang over many phænomena of the animal world, since its laws constitute the least cultivated part of philosophy. I hope, however, to be able to satisfy you, why *some* constitutions so long resist the power of fermented liquors. They have a tendency to disease, of which this poison, accidentally applied, is the proper corrective. But as all the anomalous cases are not understood, nor their marks determined, it would be rash in any one to assume that he has been impregnated with the fortunate taint. Though he should be conscious of a morbid imperfection, how can he be sure that arsenic, or mercury, is not its specific, rather than the “ sweet poison of mis-used wine !”

Till we discover fully the reason of such devi-

ation from the common course of events, it may be useful to know that there exist cases perfectly analogous. Of the effluvia that produce the small-pox, the yellow fever, and the plague, it is well ascertained that they affect some habits slightly, others not at all. It is remarkable that the pestilential air of Java proves innoxious to a few individuals, though it destroys above half the new-comers from Europe in twelve months after their arrival. To this purpose, there is a valuable passage in Sir George Staunton's account of the late embassy to China. The observation deserves the fullest credit, as the compiler of the narrative is, himself, no stranger to medicine, and as he was accompanied by a very intelligent physician.



“ Doctor Gillan understood that there were
 “ but few examples of strangers remaining in
 “ Batavia long without being attacked by fever,
 “ which is the general denomination, in that
 “ place, for illness of every kind. Europeans,
 “ soon after their arrival, first become languid

" and feeble; and a few weeks, sometimes
 " in a few days, are taken ill. The disorder,
 " at first, is commonly a tertian ague, which,
 " after two or three paroxysms, becomes a dou-
 " ble tertian, and then a continued remittent,
 " that frequently carries off the patient in a
 " short time. Many fall victims to the second
 " or third fit; but in these cases, a constant
 " delirium, and a great determination of the
 " blood to the brain accompany the other symp-
 " toms. In some, it begins in a quotidian form,
 " with regular intermissions for a day or two;
 " and then becomes a continued remittent,
 " attended with the same fatal consequences as
 " the former.—

" Of the fatal effects of the climate upon
 " both sexes, a strong proof was given by a
 " lady there, who mentioned, that out of eleven
 " persons of her family who had come to Bata-
 " via only ten months before, her father, bro-
 " ther-in-law, and six sisters, had already paid
 " the debt of nature. That there are constitu-

“ tions, however, so formed, as to be little af-
“ fected by causes fatal to many others, ap-
“ peared in particular instances ; such as that
“ of the gentleman who was governor-general
“ when the Lion was at Batavia. He had been
“ upwards of forty years in the country, was a
“ man of great application to business, and took
“ no uncommon precaution for the preservation
“ of his health : such also was one of the coun-
“ sellors of the Indies, as the members of this
“ government are entitled.” I. 242—5.

You will perceive that I have touched upon this discussion, partly to explain the tendency of the concluding lectures, and partly to exemplify (what I feel with the deepest conviction), how by their means, and some additional helps, the rising generation may enjoy life more perfectly than their predecessors, and a distant posterity be authorized to wonder how we could tamely suffer ourselves to writhe and pine under the frightful variety of plagues, catalogued by our *nosologists*. I am not, however,

so sanguine as to imagine that any human exertions can at once act as universal correctives or preventives of injurious habits. But if the benefit reaches a certain number of young persons, their example and conviction will not be without effect upon their equals.

I do not conceive that you can desire a more detailed account of the supplemental lectures, for which the hope of being useful has induced me to engage. There is, indeed, another head which I should not like to leave unnoticed. You will find that there are grounds for improvement in medicine, upon which the graduated and non-graduated regulars have seldom had the courage to proceed. In truth, notwithstanding the hourly failure of all our usual resources, in the most reputable hands, upon youthful subjects, utter inattention to self-knowledge has heretofore maintained a public feeling, which favours the triumph of intrigue over ability, and by every sort of indirect menace, deters the ordinary practitioner

of medicine from aiming at great discoveries. But there exists a *fraternity*, which, by boasting of remedies for our worst maladies, and by holding them at the same time concealed, becomes the spontaneous outcast from humanity. If you ask why its members, unrestrained as they are by concern for character, strike out no useful inventions, I shall readily own my inability to answer satisfactorily, unless I may suppose them destitute of information and of genius, not less than of shame.

That you may be able to resolve the question for yourselves, I could wish to introduce you into the busy recesses of quackery, where pharmaceutical compositions, new and old, are first disfigured, like children kidnapped by gypsies, and then baptized by the most ludicrous names. But they impose; and the disgraceful tribute levied by the proprietors, is a standing premium for fraud. What is singular, it does not avail you to see through the artifice. You may as well pay with the good grace of a dupe.

The solicitation of some friend of the family is sure to extort your share of the general contribution. I have scarcely known a consumptive person upon whom, whether willing or unwilling, a certain *public medicine*, not less contemptible than the meanest of its fellows, has not at some period been forced.

The idea of handling a matter, lately much agitated at Bristol in one of its relations, and at all times interesting, did cross my mind ; but though I had time and you had patience, I do not feel sure that I could venture to discuss the nature of establishments for the relief of the indigent sick. It fared, I suspect, in some measure, with our predecessors, their projectors, as with those more remote ancestors, who believed it sufficient for the promotion of piety, if they but erected massive edifices, and peopled them well with nuns and friars. But if it should be true that INFIRMARIES have seldom been constructed according to the rigorous principle of pure utility, it is of so much more

consequence to compensate by management, the unnecessary, but irretrievable part of the first expenditure. Recent transactions respecting the hospital at Manchester, and the conduct of that at Glasgow, are worthy of the most studious attention. Still these institutions may, no where, have been brought to yield the utmost possible harvest of good of every sort.

But I must proceed with the rapid enumeration of further advantages of the lectures, to which my leisure may be adequate. That an acquaintance with some parts of the doctrine of diseases may be of more utility to others than at present they are, or perhaps ever will be to the faculty, will strike you as paradoxical. Yet it is a serious truth. I have not counted the instances on both sides. But in general, disorders of sudden formation, when they fail to extinguish life, do not destroy, and frequently not even impair, constitutional vigor. But when perseverance in hurtful practices, whether of omission or commission, has induced a formidable chronic complaint, drugs, though they

sometimes prolong the penalty of existence, never restore (that which "gives life to life,") *the entire faculty of pleasurable sensation.*

We often see the relations of the sick bewildered by anxiety, even to the suspension of the faculties. Their trepidation, when it urges them, as it often does, to grasp at a number of incompatible remedies without suffering any one to be fairly proved, must entirely foil the ablest physician. This can only be calmed like other perturbations of the understanding. Knowledge is the approved specific against false terrors, and the security in real danger. In such moments, how soothing and salutary too, must it be to reflect (while reflection remains), that in those who approach us, tenderness is united with a portion of the intelligence, appropriate to our situation !

From this spot, I could strike into a path of pleasant contemplation, and entertain you with the prospect of sympathy heightened by just conceptions of the condition of mortality,

and saved from spending itself in struggles that do not advance, or that counteract its purposes. But I do not mean, (and I think it would be needless) to wander far from *selfish*, which is the base of *social*, morality. It is by observing the laws of the *former*, that we continue the longest time, and in the most effectual way, capable of fulfilling the duties of the *latter*.



Deeming it important that you should fully comprehend how the dissemination of medical knowledge is to enrich medicine, I shall a little unfold what has been already intimated. Since the immortal Sydenham, the region of human maladies has been more accurately explored. Many landmarks have been fixed; and what is termed the *history of diseases* has been composed with infinitely superior fidelity. But in cases of very gradual deviation, much is yet wanting to fill up the space between the state of perfect health, and the state regarded as full-formed disease. If you consider how rarely medical men are called upon to examine

the various intervening conditions, and how unfavourable their fugitive visits must be to examination, you will not deem it absurd to suppose that the interval will long remain a blank, unless domestic come in aid to professional observers. Important circumstances or *symptoms* arise without notice, and pass away without leaving any certain trace. They are often lost to the science: They are lost, with their possibly beneficial indications, to the patient. And wherefore, but because the eye of the spectator has not been taught to see? Hence the physician, who is to determine on the evidence, cannot confide in the report of the witness; nor can the witness confide in himself.

I shall trust to your sagacity for the detection of some inferior benefits, which would be ensured by rendering these pursuits popular; and but point out the most remote perhaps, though certainly the greatest of all; indeed the result and consummation towards which whatever else we gain is but preparatory. By the joint efforts of the

intelligent in the profession and out of it, the genuine **PREVENTIVE OR PROPHYLACTIC MEDICINE** would be at length established. I am aware that medicine is usually *defined* the art of preventing and curing diseases. Both these pretensions it often realises. But *preventive medicine*, the destined guardian of infancy, youth, manhood, and old age, adapted to the interior of families, has yet no existence.

Preliminaries we have ; and perhaps some detached fragments ; but it is a **CODE**, or system of doctrines which we need. The labours of anatomists and of medical observers are preliminaries. But the most valuable, and as it would appear, the most difficult to obtain, are what might be called the *metaphysical* preliminaries, did not the term labour under a bad reputation. However the principles may be called, in referring the actions of life to the machinery of bone, muscle, vessel and nerve, they are indispensably necessary. In a rank where all contributors should be placed in their

relation to the desired object—a sound mind in a sound body—LOCKE and his great predecessor, HOBBES, would stand most remote from the dissector. HARTLEY—of whose work, first published in 1749, we owe the (second) edition of 1791 less to public demand than the just piety of his descendants; a proof paramount to all others, of the unconcern of mankind about the true means of ease and happiness—HARTLEY would occupy the next and most conspicuous station. Between HARTLEY and SYDENHAM, as uniting their merits, we should find the living author of ZOONOMIA.

Among the *fragments* towards a system, one tract I consider, as deserving honourable mention wherever the public health is in question. This is *the dissertation by Dr. William Cadogan, on the gout and chronic diseases.* It discovers much observation of life, and breathes the genuine spirit of philanthropy. If it contains errors of reasoning, this is a venial fault. Want of discrimination between the ultimate conse-

quences of different fashions of debauchery, may be a more serious blemish.

Concerning the use and value of life and of health, Dr. Cadogan observes :—“ The generality of men seem to me not to bestow a thought upon either, till it be too late to reap the benefit of their conviction ; so that health, like time, becomes valuable only when it is lost ; and we can no longer think of it but with retrospect and regret.” After an allowance for the young and robust, he goes on to say that, “ it is very surprising that mankind in general should be mistaken and misled forever in the same perpetual round of fruitless attempts to repair and establish the health ; not the ignorant vulgar only, but the sensible, the judicious, men of parts and knowledge in other things, in this case equally blind, should pursue, with the same vain hope, after repeated disappointments, the thousand and ten thousand idle arts and tricks of medication and quackery ; never

“ once lifting their eyes up to nature, or consulting her book, open as it lies for the perusal, conviction, and benefit of all.”

Hence (and there is nothing to the contrary in the work), I apprehend the writer did not penetrate to the root of the evil. “ *The generality of men do not bestow a thought on health*”—True: but reflect a moment before you attack them, on that account, by censure or by scoffs. Do we see flocks of sheep move otherwise than as driven? On what *can* the *generality of men bestow thought*, but on the objects towards which parents and perceptors—the shepherds of their youth—turn the mind’s eye?—When landed upon the unknown shore of life, how should they escape its dangers, if neither diligently instructed to elude the wiles of the enemies they must encounter, nor furnished with defensive armour against open force?

You may desire my judgment respecting the books (they abound in all languages), that

profess to be written for domestic use. You have it by implication already. But as I have been thus far frank, I will not desert the character at parting. Most of these books, whether compiled or partly original, are compends of the practice of physic. They therefore proceed upon a false plan, and turn out little or nothing to our purpose. For we want not to be taught how to prescribe, but how to avoid the necessity of prescriptions. I must, indeed, have expressed myself ill, if you do not understand that I think books inadequate to the foundation of either species of medical knowledge ; the professional or the popular. In both, books may greatly assist ; and one great use of this attempt at instruction by the senses, if not very unskilfully conducted, will be to enable you to avail yourselves of books. When fully qualified for their perusal, you would be most benefited by treatises giving a faithful description of the effect of any given mode of life upon the whole exterior and interior, upon the aspect, organs, sensibility, upon the powers of

thought and action. If few materials exist towards such treatises, they will rapidly accumulate, as soon as we shall generally think it worth while to cultivate an acquaintance with ourselves.—I by no means deny that expedients applicable to sudden emergencies should be made universally known. Were my views realised, that would be so much the more easily effected.

To several medical writings for the people, it has, probably with great justice, been objected, that *they tempt all the world to set up for doctors.* It is the only internal objection which I believe even misapprehension can allege against the plan I have so strongly recommended. For as to difficulties on the score of time and money, I only request you to reckon, day by day, how time and money are employed in the course of a liberal education, and, at its close, to sum up the advantages which so much expenditure of *both* usually procure. To the objection then from the fear of abuse my reply is short; and I flatter myself you will find it conclusive.

The sort of information I have endeavoured to define would stifle abuse in its cause. It is not the considerate and the knowing that we see busy in forcing medicines or medical men upon their acquaintance; nor can we well imagine that instruction, (which so far as it goes should be radical) would convert prudent forbearance into meddling rashness. Were it possible to communicate but a very few clear anatomical and pathological ideas, to those female hawkers of medicinal and dietetic receipts of whom I before spoke, they would instantly burn their miserable wares. Theirs are the errors of bewildered ignorance. They would probably be corrected by accurate ideas of any kind. For possessing then within themselves some standard by which to judge of what they know and what they do not know, they would be deterred, by the consciousness of incapacity, from taking into their hands the “issues of life and death.”

If an early and appropriate introduction to

the human physiology bring with it such advantages, you may ask why the medical tribe enjoy life so little better than others. I do not contend for our superiority in this respect. Our parents when themselves of the profession aspire not beyond vulgar views and sordid wishes. We are therefore not provided, in youth, with any amulet to charm away personal suffering, but are brought up, like the rest of the world, just to earn money. Equally with others we are left to acquire baneful habits. And by the time we feel the effects of the universal negligence, our condition is little the better for discerning (when we do discern) the manner of its operation. We commonly find or believe ourselves in the "yellow leaf;" and habit is reinforced by despair.—Still it is perhaps true that medical men, oftener than others, are terrified into a resolution to avoid the causes of disease, and that they succeed in retrieving a constitution.

I shall only offer a few sentences more of explanation. You may have heard that something more than I have yet mentioned was once in view; and it is true that I relinquished a favourite portion of my original design from fear of ruining an useful undertaking by aiming at too much. I was absurd enough to wish that women might be invited to a *part* of these lectures. I would not indeed have been concerned in proposing an exhibition of bones and blood for their amusement. But no objection on the ground of indelicacy or disgust can be brought against some anatomical subjects. Women, for example, attend without scruple lectures in which the eye is demonstrated. And who has not seen mothers, the most delicately educated, brave disgust for the sake of their children? I supposed there might be those that would in this instance display equal fortitude.

It may not yet be too late. A select and shorter course might be hereafter prepared for females. It would be more easy of accom-

plishment, and would, I doubt not, be undertaken with still greater pleasure by those who have undertaken the present. The rest must depend on the opinion concerning this course, which you shall carry home and to the houses of your friends.

Towards the close of the course to which the preceding lecture belongs, the author had the pleasure of seeing the experiment, suggested in the concluding page, tried with the most compleat success. It was natural that one or other of the gentlemen, principally concerned, should feel a degree of reluctance to engage in it. Their reputation was in some measure, staked upon the issue, people less easily resist temptations to be witty than to be wicked : and in case of failure the wits of Bristol would doubtless have vied with one another in reporting the lecturers as *would-be tutors to the ladies in anatomy.*

In opposition to the danger of ridicule stood the satisfaction which the first course was giving ; the conviction expressed by several of the audience that many of the lectures might be delivered before women, without the remotest

offence to delicacy ; the utility of the information to mothers ; and the possibility of framing a plan, free from objection.

It was advisable rather to use excess of caution in this first essay. Every subject therefore and every expression upon which the most perverse imagination could have put an offensive construction, were diligently to be avoided.

Another difficulty occurred. Had admission been promiscuous, to render the lectures disagreeable to that part of the audience for whom they were chiefly designed might have been a source of amusement to some individuals ; and had women only been admitted, unpleasant rumours would in all probability have been fabricated. For the sake therefore of ensuing selection, and avoiding secrecy, it was agreed that tickets should be issued to females only, but that each subscriber should introduce a gentleman.

About forty ladies of great respectability entered their names. No unpleasant occurrence took place, and the audience are known to have gone away so well satisfied, that on a second attempt of the same kind equal encouragement may be expected.

The subjects of the lectures were,

An account of the constituent parts of the body, or *general physiology*, as it has been termed.

An exhibition of many of the bones.

A demonstration of the eye, ear, and other organs of sense.

A minute account of the teeth, illustrated with excellent preparations.

The heart, and a considerable portion of the vascular system.

A general view of the nervous system, and of the absorbents.

The lungs and some other of the viscera.

These subjects were comprehended in ten lectures.

At the end of both courses, a few lectures on the laws of life were delivered to the audiences united.

The author hopes the growing inclination of the public for knowledge of the most curious and most useful kind will produce more than one imitation of the whole of this plan.

As far as personal welfare is concerned, both sexes have claim to such instruction. But that sex which has at all times the care of the young, and of both young and old under indisposition, must have the most frequent opportunities of applying it to the *advantage of others.*

N O T E S.

Page 12.—Lady M. W. MONTAGUE had had her son inoculated at Constantinople (or Pera.) The case of the daughter is thus told by the family Surgeon: “This noble lady sent for me last April, and when I came, she told me she was now resolved to have her daughter inoculated, and desired me forthwith to find out matter for the purpose. I pleaded for the delay of a week or two, the weather being then cold and wet; for indeed I was unwilling to venture on an experiment *altogether new and uncommon* here, in a cold season: though I am now convinced it may with due care be practised at all times and seasons, but still with more safety in the temperate and favourable. I also prayed, that any two physicians, whom they thought fit, might be called, not only to consult the health and safety of the child, but likewise to be eye-witnesses of the practice, and contribute to the credit and reputation of it. This, indeed, was at first denied me, it may be, out of design to keep it a secret, or least it should come to nothing. In the mean time, having found proper matter, I ingrafted it in both arms, after the usual manner; the child was neither blooded nor purged before, nor indeed was it necessary, considering the clean habit of body, and the very cool regular diet she had ever been kept to from her infancy. She continued

easy and well, without any sensible alteration, bating the usual little spots and flushings till the tenth night, when she was observed to be a little hot and feverish. Three learned physicians of the College were admitted, one after another, to visit the young lady; they are all gentlemen of honour, and will, on all occasions declare, as they have hitherto done, that they saw Miss Wortly playing about the room, cheerful and well, with the Small-pox raised upon her; and that in a few days after she perfectly recovered of them. Several ladies and other persons of distinction, visited also this young patient, and can attest the truth of this fact."

Maitland apud Woodville Hist. of Inoc. p. 86.

Many physicians held and continued to hold the practice in sovereign contempt; some found it easier to discredit the facts than to recur to observation for their verification: others, though believers in its advantages, "*did not yet think themselves sufficiently warranted to recommend it to the families they attended.* ib. p. 91. a striking proof of their want of courage to risque reputation (that is, profit) for the benefit of their patients!

A curious instance of a woman that of many children had lost, by the small-pox, all but one which she refused to have inoculated, is told by Haygarth, who thinks the want of care on the part of the rich to prevent its introduction into places where they reside, now they are secure themselves, is the principal cause of the increased mortality among the poor from the small-pox. Much however ought to be ascribed to carelessness, arising from the hopelessness which is so frequent among this class; I have on another occasion remarked that this disposition shews itself in the satisfaction with which they see their children die and in the means they use to prevent increase of family.

Highly commendable pains have been taken by Ruggles, Davies, Eden and others, to determine the situation of the poor. But no approach can be made towards tolerably exact knowledge on this subject, unless the enquirers be acquainted with the effect of this and that power, this and that privation, on the living system. They will not know what to look for, or how to put questions. It is on this account perhaps that they have missed a very material piece of intelligence, respecting the use of opium among a portion of our poor. Whether it was first taken to recruit the labourer after excessive toil ; or occasionally to cheer the gloom of despondence ; or to make up the deficiencies of that abominable water-gruel and potatoe diet, by which the joyless being of so many pale, meagre, shivering women and children is prolonged, I am not informed. I had known the fact for some time, and lately received the following account from a medical observer.

“ The use of opium as a cordial, is very general among the poor of Sunderland, and, I believe, of the other sea-ports on this coast, and they all agree that it enables them to support a longer abstinence from food than they otherwise could. Its use seems unfortunately as bewitching as that of spirituous liquors, and a gradual increase of the dose as certainly induces a state of debility of the whole frame as the other baneful habit. Nothing can be more wretched than the appearance of some whom I have seen ; their skin of almost a leaden hue, the abdomen tumid, the limbs shrunk, and a countenance expressive of infinite anxiety and wretchedness. One woman who was admitted at our Dispensary about five years ago, had with all these symptoms, the appearance of advanced rachitis, and declared that the enlargement of the joints had succeeded the

habitual use of opium, though she did not attribute it to her favourite drug. She was afflicted with constant wandering pains, restless nights, an irregular state of bowels, and unless when under the full operation of opium, felt the most dreadful depression of mind, and most harrassing sinking and anorexia. She was seldom without opium in her mouth, and my endeavours to effect a gradual decrease of dose were fruitless ; she was dismissed, and I heard no more of her except that she was living about three months ago."

Page 15.—In the *Irish transactions* for 1789, we are told that out of 17650 infants 2944 died, mostly convulsed, for want of fresh air, before they were a fortnight old. The degree of reduction of this mortality is thus expressed by the author of the paper : By " cleanliness as well as by the constant and uniform admission of atmospheric air by night as well as by day, diseases may be prevented which it has hitherto been found difficult and sometimes impossible to cure." Dr. Darwin says : " In a large family, which I attended, where many female servants slept in one room, which they had contrived to render inaccessible to every blast of fresh air ; I saw four who were thus seized with convulsions and who were believed to be affected by sympathy from the first who fell ill. They were removed into more airy apartments, but were some weeks before they all regained their perfect health." II. 326. See also the *London Med. Transactions*, 1785.

Page 43.—The same habit obtains, as the reader will comprehend, in a degree through all our classes of gentility. But do people so young, any where else but at Oxford (and Cambridge?), regularly take their afternoon's

potation of strong wine? Dr. George Fordyce was struck in London, by the prevalence of a complaint, (which I ascribe principally to this abuse), among an order whose members very generally pass years at the University. He couches under an obscure expression, an odd reason for the fact: "They are very apt," he says, "to be affected by hypochondriacal complaints; *perhaps from an idea that they do not occupy their proper rank in society.*" (*Transl. of a Medieval Society*, p. 258. 1793. *Johnson*). As if the active principle, struggling for vent, wore the system—and mere littleness, without deep distress or intemperance, were the occasion of an affection so serious as hypochondriasis.

Page 59.—Some of those minor wits, who are obliged to recur to misrepresentation as a foundation for ridicule, would have us believe that Dr. Cadogan recommends "giving a fillip to nature" occasionally by wine. No such advice occurs in his dissertation. He says, very justly, p. 61:—"whatever the advocates for a *little wine every day* may think or argue in favor of it, they are most undoubtedly in a very great error: and it were certainly much better and safer to drink a bottle and get a little merry once a week, drinking water only, or small beer at all other times; in which interval Nature might totally subdue it, and recover entirely." After asserting, page 89, that "wine undoubtedly produces nine in ten of all the gouts in the world," he allows, page 91, a degree of (perhaps ill-advised) indulgence. "I do not mean that this rigorous abstinence from wine is to last for life, but only during the conflict with the disease. As soon as the patient has recovered health and strength enough to use exercise to subdue

it, he may safely indulge once a week, or perhaps twice, with a pint of wine for the sake of good humour and good company, *if they cannot be enjoyed without it.*" This is all he has in favour of wine-drinking; and is this enjoining occasional intoxication?

